

Alden (Ed.)

T.H.B.-

MEDICAL USES OF ALCOHOL.

BY EBENEZER ALDEN, M.D.

— [Boston after 1868]

[The design of the following papers, written by request of the Executive Board of the Massachusetts Temperance Alliance, and read and discussed at their last two monthly meetings, is to call attention to the medical uses of alcohol, especially in their relation to the temperance reform, to promote which the members of the Alliance are associated.]

By Dr. 13
Jan 8/76

PART I.

Mr. President and Gentlemen:—

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At the last monthly meeting of the Executive Board of the Massachusetts Temperance Alliance, at which the writer was present, after the completion of the usual business of the session, he was invited by the President, as one who had been long interested in the promotion of temperance, to address the meeting, which he did in a few unpremeditated remarks, re-affirming and recommending the principles of the temperance reform.

Those who adopt these principles propose to remove the evils of intemperance, and its kindred vices, by securing in all proper ways, suasive and persuasive, legal and moral, the universal abandonment of all alcoholic beverages in health; and of the manufacture and traffic in them for that purpose; and that only such a use shall be made of alcoholic medicines in disease as may be required for its most speedy removal; and that in all cases, on account of their dangerous nature and tendency, they be discontinued as soon as the safety of the patient will admit. It was further said, on that occasion, that the use of alcoholic drugs, in the form of domestic and patent medicines, is believed to be one of

the chief obstacles in retarding the progress of temperance. Perhaps it was this remark which was the occasion of the vote inviting me to address you again to-day. Be that as it may, it is my firm conviction with regard to these medicines, which are sometimes called "secret" and sometimes "patent," that whatever they may contain which is secret, it is "patent" that alcohol gives them currency, and that alone. Without it they could not be sold for enough to pay for the bottles which contain them and the wrapping paper in which they are enclosed.

A few of them, it is true, may have some value, if properly applied in the cases for which they were originally devised; but most of them are made up from the cast-off prescriptions that have been used and thrown aside, and are of no more real worth than the shoddy manufactured from worn-out garments. They not only fail to accomplish the good for which they are recommended, but they occasion an untold amount of evil which those who use them do not anticipate. They create and foster an intemperate appetite, and there is abundant evidence to show that many individuals, apparently saved from a drunkard's grave through the persuasion of friends to abstain from intoxicating liquors in their ordinary form, have been lost and carried to the lowest depth of degradation by the renewal of a diseased appetite through the use of these so-called medicines. In the judgment of every well-educated physician, the public sale of such articles is a nuisance that ought, if possible, to be abated.

Mr. President, I am persuaded that if some of these compounds, so much lauded by their proprietors, were submitted for analysis to our learned State Assayer,

who was recently called before a committee of the Legislature, and proved himself so skillful in finding ailment for well men where others fear an element to make well men sick, that even he, with all his knowledge of re-agents, would decline to give his certificate in favor of the safety of these articles, with or without alcohol.

What I contend for, as a friend to humanity, as well as a friend of temperance, is, that these drugs should be analyzed by competent persons duly authorized, and their composition stated on the wrapper that contains them, and if they are found to contain poisons that they should be so labelled, and that the sale of them by unauthorized persons should be prohibited by law. When this shall have been done, the temperance reform will have advanced one step in the right direction.

Another and more formidable obstacle to the progress of temperance, because more difficult to control, is the too common and abundant use of alcoholic medicines by regularly-educated physicians.

Alcohol, as a medicine, has a place and a power. It may be a very dangerous medicine. It may have destroyed more lives than it has saved. That is a good and valid reason why it should be used with caution, but not for its abandonment until other and safer means can be procured. The first duty of a physician is to his patient. He has other duties, but they are subordinate to those he owes to him who has chosen him as his medical adviser.

As early in the history of the Temperance Reform as 1827, the Massachusetts Medical Society, at their annual meeting, held in Boston, June 7th, adopted substantially, it believed, the true principles on this

subject, which are embodied in the following preamble and resolves, which were adopted with great unanimity, and which, having never been repealed, are still in force :

“Whereas there is reason to believe that the habitual and intemperate use of ardent spirits is often the consequence of an opinion that such liquids contribute to the health of man; and whereas it seems to be a duty peculiarly belonging to this Society to correct and oppose so insidious an error, therefore

Resolved, 1st, That in the opinion of this Society the constant use of ardent spirits is not a source of strength and vigor, but that it is generally productive of sickness and disease.

Resolved, 2d, That this Society agree to discourage the use of ardent spirits as much as lies in their power; and for this purpose to discontinue the employment of spirituous preparations of medicine whenever they can find substitutes; and that when compelled to use them for any great length of time to warn the patient of the danger of forming an unconquerable and fatal habit.

Resolved, 3d, That in the opinion of this Society, the excessive and constant use of wine is a cause of many diseases; and though it is useful in some of them, as in the stage of weakness in fever, its use is even in these cases often carried too far and continued too long.

Resolved, lastly, That this Society will use the skill of its members in ascertaining the best modes of preventing and curing the habit of intemperance.”

In accordance with the last resolution they then proceeded to offer a reward of fifty dollars for the best dissertation on the subject, which was afterwards read to the Society and published.

Do you ask whether these views are still entertained? I answer yes. I am aware that there are exceptions, but I apprehend even here more in practice than theoretically. It is very hard for a young physician, in a city especially, and even for older ones, to resist the tide of public sentiment that alcoholic stimulants are

essential restoratives to poor, sickly, suffering humanity. They cause such a delightful feeling of relief to tired nature ; such great rest, such splendid dreams. Alas, such patients and their physicians too often do not realize that these same restoratives will but too soon aggravate the diseases they are taken to heal, and instead of proving "renewers of life" become its destroyers.

I adhere to the views advanced and defended according to my best ability, as to the influence of alcohol in health and disease, before a committee of the Legislature in 1867: "That as a beverage, alcoholic stimulants ought not to be used at all. As medicine, they ought to be used with great care, and only in such quantities and for such a length of time as is necessary in the judgment of a judicious physician."

To that testimony, after four years' additional experience, I now add, that I am convinced, on what I deem good evidence, that many of the sudden deaths that have recently occurred of men in active life have been hastened by over work, and an effort to overcome fatigue by stimulants where rest would have been the appropriate remedy.

These views I might substantiate by reference to authorities to any extent, and at any length, were it desirable. My object has been not so much to cite authorities as to present in few words the results of my own experience and observation.

I have only time to notice one more obstacle to the temperance reform, which is the persistent fallacy of calling alcoholic drinks a nutriment.

IS ALCOHOL FOOD?

What is food? Aliment, nutriment, that which, re-

ceived into the human body, is, by a vital process, assimilated to it:—converted into chyme, chyle, blood, muscle, brain. If alcoholic liquors are thus nutritious, why resist their use? If they are a wholesome diet, why not allow the poor to enjoy the benefit of them as well as the rich? But if, whatever the chemists may say, alcohol is essentially a medicine and not a food, producing its effects in the human body not by a process of assimilation, or digestion, but by its stimulant and narcotic power, the greater portion being eliminated and expelled through the emunctories, which are nature's scavengers, unchanged,—then do not mislead the young and unsophisticated by calling it food. It is a terrible misnomer. Call it by its right name. Shakespeare will furnish an appropriate one if you are at a loss:

“O, thou invisible spirit of wine, if thou hast no name to be known by, let us call thee—devil.”

Place it in the medicine chest, where it belongs, or on the apothecary's shelf; but do not allow it on your table, by the side of heaven's beverage, pure water, to allure your children to a drunkard's grave. The whole need not a physician, neither do they need physic.

But it is said alcohol is a food, in a scientific, if not in a vulgar sense. To which I reply, in the language of Dr. Chambers: “We have no right to withdraw words from their ordinary acceptance, clip their meaning, and then tell the vulgar that they are simply one thing in science and another in the world.” The same author shows that Baron Liebig's division of aliments into supporters of respiratory combustion and repairers of tissues, into fuel and building materials, is untenable.

ble. The building materials may be used as fuel, and the fuel as building materials.

Alcohol is neither. According to Dr. Boeker's experiments, although alcohol quickens the frequency of pulmonary movements, it diminishes the quantity of carbonic acid exhaled by the lungs, and therefore is not a supporter of combustion. M. M. Lallemand, Perrin, and Duroy, shew that alcohol passes through the body unchanged, leaving, so far as it is known, none of its substance behind. That alcohol, cautiously administered, has its uses as a medicine, is admitted; but not that it is, in any proper use of language, a nutriment.

The editor of the *British Medical Journal*, after a full statement of his views on the nature and mode of action of alcohol, affirms: "We have no hesitation in saying, that to call alcohol food, in the present state of our knowledge of its effects, is an abuse of language. Those substances only can be rightly called food which are essential for the purposes of life,—which form a part of the healthy body,—which are capable, under the influence of the organic processes, of being incorporated in whole or in part, decomposed or undecomposed, with the body. What we affirm is, that we possess no particle of scientific evidence to show that it (alcohol) is such."

If these things are so, the adjunct Professor of Chemistry in Harvard College was right, when, several years ago, he said in his testimony before a committee of the Legislature: "If the definition of the term *food* is to be confined to meaning that only those articles are to be considered as food which go to build up the tissues, then alcohol is not to be classed as food."

PART II.

Mr. President and Gentlemen:—

At the last meeting of the Board, in accordance with your invitation, I read, as far as prepared, a paper on the Medical Uses of Alcohol, in which I endeavored to show,—

1. That the use of alcoholic drugs, in the form of domestic and patent medicines, is one of the chief obstacles in retarding the progress of temperance.

2. That another and more formidable obstacle, because more difficult to control, is the too common and abundant use of alcoholic medicines by regularly-educated physicians.

Under this head I endeavored to show what are the legitimate uses to which alcoholic medicines should be applied, and what the limits which should restrain their use.

3. I stated that, in my view, persisting in calling alcohol food is a grave error, by which many are deluded and the progress of temperance retarded.

4. I then presented certain statistics to show that, although alcohol, as a medicine, cannot, in our present state of knowledge, be wholly dispensed with in the practice of physic and surgery, recent investigations have shown that its use may be very much diminished, not only without injury, but with positive benefit to the sick.

It is so important that the public mind be set right on this subject, that you will pardon me if I state the facts, then briefly alluded to, somewhat more at large, and also the authorities by which they are substantiated.

What we seek, as friends of temperance, is truth. We have no theory to propound or to support. As an association, we are grappling with a great evil, which

we are endeavoring to remove, so far as we can do it with due regard to other interests, by removing its cause. The medical use of alcohol has been, and still is, one of the most formidable obstacles to our progress in this work. If we can show that in the march of science, and by a careful observation of facts, we have found a method by which alcoholic medicines can be dispensed with in some cases, and in others used in diminished doses, not only without prejudice to the sick, but with an increasing percentage of recoveries, we shall have taken an important step in the right direction for the promotion of temperance.

To show the nature of alcohol, the importance of abstaining from it as a beverage, and of using it with great caution as a medicine, and discontinuing its use as soon as the safety of the patient will permit, I have already presented the resolutions of the oldest medical society in the State, as adopted nearly forty-five years ago, and which, being still unrepealed, may be considered as representing the views of the faculty at the present time. That these views are in harmony with the opinions of respectable physicians in other countries I show by asking your attention to the following certificate of one hundred and twenty highly respectable medical men in England, as published in the *Boston Medical and Surgical Journal*, volume 32, page 187.

ALCOHOLIC DRINKS.

“We are of opinion that there is no principle of nourishment or strength for the human frame in alcohol, or generally in drinks of which it forms a part, such as ardent spirits, fermented wines, cider, ale, porter, and others; that any trifling portion of nourishment con-

tained in the last three is greatly exceeded in barley water, porridge, or gruel, made from an equal quantity of grain; that alcoholic beverages generate ultimate weakness instead of strength; that alcohol never entirely assimilates with the corporeal system; that intoxicating fluids are in no wise necessary to persons in ordinary health, nor are they required for any particular constitution; that the daily or habitual use of any portion of them (much more what has been generally, but erroneously, thought a moderate portion,) is prejudicial to health; that the excitement or cordial feeling they create is mere stimulation, which departs in a short time, and is unproductive of any element of real strength; and that, contrary to ordinary opinion, the health and average comfort of the nation would be greatly promoted by their entire disuse as beverages." See Boston Medical and Surgical Journal, vol. 32, p. 187.

To this testimony I add the views of another English physician, as printed in the *Medical Times and Gazette*, and copied into Braithwaite's Retrospect, vol. 61, p. 287.

ALCOHOL — ITS ACTION ON THE SYSTEM.

Dr. B. W. Richardson says: "The true character of the alcohols is, that they are agreeable temporary shrouds. There is no evidence at any stage of their action that there is increase of power in the organism. The overwhelming fact that there is reduction of temperature following their use, quite puts out of the question any chemical consumption of them within the body to any amount. If, under scientific administration, any of them are found to cure fever, it can only act by lowering temperature and checking waste, not by sustaining, as food sustains the body." — *Medical*

Times and Gazette, December 18, 1867, as quoted in *Braithwaite's Retrospect*, part 61, page 287.

Such being the views of medical men as to the influence of alcoholic medicines, it may well be supposed that they would inquire whether these medicines, like some others, are not employed where other and safer remedies would be equally if not more beneficial. Each physician, to a certain extent, finds a response to such inquiries in his own individual experience. But the public need something more. To be satisfactory, the experiments should be conducted in a wider circle than the limited experience of private practice can supply.

Hence we resort to the records of large hospitals to confirm or discredit the deductions of individual observation and experience.

Dr. Gairdner, professor of the practice of medicine in the University of Glasgow, considers the assumption that alcohol is not only a food, but that it is *the* food of all others to be chiefly relied upon for supplying the material of repair in fevers—to be erroneous; and, if erroneous, that it must not, in the great interests of humanity, be allowed to shelter itself under the authority of great names, or to take refuge in the theoretical confusion which may be raised around it, in the present unsettled state of the physiological question.” He adds: “I shall venture to state the opposite doctrine, in as precise terms as the nature of the case admits, viz.: that alcohol, *per se* (that is, apart from the other ingredients present in some stimulating liquors,) is not in any sense a fitting material to be chiefly relied on for the repair of the textures in fever; that, even admitting the doubtful hypothesis that alcohol may, under certain circumstances, act as a true reparative material,

its practical utility in this direction is very strictly and even narrowly circumscribed by the stimulating, or medicinal narcotic, and ultimately poisonous action, which it always exerts upon the nervous system when given in sufficiently high doses ; that in ordinary medical practice we cannot, as a rule, secure any considerable amount of the supposed *feeding* action of alcohol without a certain amount of the medicinal and poisonous action ; and that the proper use of the stronger alcoholic liquors in acute disease is, therefore, therapeutic, and not properly dietetic." Hence, he maintains, "that when prescribed in the high doses recommended by Dr. Todd and others, it destroys the susceptibility of the system for other and more natural food, disturbs the power of assimilation, retards the elimination of effete matters from the blood, and, by poisoning the nervous system, renders the patient more or less insensible to the natural wants of the exhausted body."

To test the principles, Dr. G. proceeds to give the results of two months' experience in the Glasgow Fever Hospital, in the treatment of 68 cases of fever in males, mostly typhus, and 58 in females, in which the amount of liquor used was very small, and the percentage of recoveries larger than was attained under higher stimulation. Towards the close of 1852 an epidemic fever was prevailing in Glasgow, and Dr. Gairdner, with three other physicians, had the charge of the hospital. It was hinted that his *ratio* of stimulation was much less than that of some of his senior colleagues, and doubtfully orthodox. Under these circumstances he felt it to be a duty to inquire into the results, which he states as follows :—

In a total number of 703 cases, representing a very

low scale of stimulation, the mortality was 11.5 per cent. while the mortality in the adjacent years from typhus in the same hospital, and in the same epidemic, was from 15.81 to 18.86 per cent. In view of these facts, which I have stated as briefly as possible, Dr. G. has reached the conclusion that in the treatment of fevers alcoholic stimulation is not a proper substitute for ordinary food; that beef tea with alcohol, so much favored by some physicians, is very inferior in nutritive value to milk.

Dr. G. mentions another fact as the result of his experience, worthy of special note in certain localities, not to say in Boston, that in self-limited fevers, in which the phenomena of the crisis are well known, and the course of the disease may be easily defined and anticipated, it is usually requisite to be very sparing of stimulants in what may be called normal cases, while any considerable excess has a tendency to convert the case into an abnormal one, and postpone the crisis. He then expresses his conviction, "That, as a result of improved consideration given to the subject, it may be confidently anticipated that the profuse and continuous administration of alcoholic stimulants, with a view to alimentation in acute diseases, will ere long be abandoned, as inconsistent with enlightened physiology and a sound practice."

Another most important consideration noticed by Dr. G., which is specially interesting to us as members of a temperance association, bearing upon the excessive and profuse stimulation referred to in the preceding statements, is, "That such liberal doses of wine and spirits given habitually, under medical advice, tend to give a wrong bias to public opinion, and (even apart from the moral consequences arising from the abuse of

alcohol in liquors,) to involve the whole medical practice of the country in a system of unnecessary, and, therefore, wasteful expenditure.

ALCOHOLIC STIMULATION IN CHRONIC DISEASE.

The facts I have already stated relate chiefly to the use of alcoholic medicines in acute fevers. But there is still another use to which they are applied more extensively, for a longer period, and ultimately with more fatal results. It is as a remedy in chronic diseases.

It was especially to this use that the venerable Dr. Rush referred, when, in his last completed course of medical lectures to a class of which I was then a member, he uttered those memorable words: "Gentlemen, I charge you not to use tinctures in the treatment of chronic diseases, if you can avoid it. I shall discard them in my own practice in the future, for I determine that hereafter no man shall be able to rise up in the judgment and say, 'Benjamin Rush made me a drunkard.'"

On this topic I invite your attention to the testimony of Dr. Francis E. Anstie, senior physician to Westminster Hospital, and the more confidently, because as dissenting from some of the positions we have taken with regard to the use of alcohol in acute diseases, he may be listened to with less prejudice by those who seek truth and are willing to review their opinions.

Dr. Anstie says that the great majority of patients afflicted with chronic or nervous diseases, especially those attended with much mental depression, "at once or very readily develop a strong liking for alcoholic beverages; a liking, too, which is precisely of the most dangerous kind." He adds: "If ever there was a case in which the physician may make himself, in the most

tragic sense, the evil genius of his patient, it is in this." If it be left to the sufferer to settle the dose, there is the greatest danger that the necessary quantity will be exceeded, and, instead of moderate stimulation, semi-intoxication will be produced. He adds: "There is no more dangerous trial for a person subject to periodical attacks of pain and depression, than that first experience of 'alcoholic narcotism.'" In such circumstances, it is a melancholy fact that the oblivion of slight drunkenness is most seductive; and the chances are great that on the recurrence of the same symptoms, the patient will long, with increasing eagerness on each successive occasion, for the same luxurious stupification. Let no one think that this warning is the expression of fears based on mere imagination; my own experience has supplied only too many instances of the reality of the danger; and, inquiry among physicians whose practice in nervous diseases is large, has added greatly to the strength of my convictions.

The occasions on which alcoholic medicines are prescribed in chronic diseases, in stimulant or narcotic doses, are almost as numerous as the diseases themselves. In most of these cases the benefit derived is exceedingly transient, if any relief is obtained, while the injury is permanent.

However this may be, it is conceded on all hands that when, in the use of alcohol, either as a beverage or a medicine, the limits of modern stimulation are passed, narcotism commences.

What is narcotism, and how may we ascertain its approach? I reply in the graphic language of the author of "The coming man will drink wine," whom no one will accuse of being a "radical aquarian," "The

first narcotic symptom produced by alcohol is a symptom of paralysis. We allude," he says, "to the flushing of the face, which is caused by paralysis of the cervical branch of the sympathetic nerve. This symptom usually occurs some time before conspicuous manifestation of the ordinary signs of intoxication, which result from paralysis of the cerebrum." Chronic alcoholism, however induced, whether in the use of liquors, with or without the advice of a physician, is not only itself a most dangerous disease, but it unfits the system to sustain the shock of violent epidemics, or of sudden and severe accidents. Multitudes in such circumstances die, who, under the use of ordinary remedies, might have recovered, if it had not been for the self-imposed prostration occasioned by bad advice and pernicious habits. It would be a sad record over the remains of many an individual, were the cause of death inscribed upon his tombstone.

He adds: "The narcotic effects of alcohol upon the entire human organism are so bad that even the teetotaler need not to exaggerate them. The stomach is not only damaged, and the cerebrum ruined, but a slow molecular change takes place throughout the nervous system, which ends by destroying the power of self-control, and utterly demoralizing the character."

Mr. President,—In view of the preceding facts and arguments, permit me to renew my adhesion to the principles of the Temperance Reform; and, as a physician, to express my deliberate conviction, that in the treatment of disease in coming years, new and more successful methods will be discovered than we now possess, more in harmony with the laws of health and life, in which alcoholic narcotics will rarely find a place.